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INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Application Number	10/602315	
(Use as many sheets as necessary)	Filing Date	June 24, 2003	
OIPE	First Named Inventor	Ahn, Kie	
	Group Art Unit	2812 2829	
(MAR 0 5 2004 (4)	Examiner Name	Unknown	
Sheet 1 of 2	Attorney Docket No: 1303.107US1		
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US PATENT DOCUMENTS						
Examiner Initial *	USP Document Number	Publication Date	Name of Patentee or Applicant of cited Document	Class	Subclass	Filing Date If Appropriate

	OTHE	R DOCUMENTS NON PATENT LITERATURE DOCUMENTS	·
Examiner Initials*	Cite No ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	72
		BENDORAITIS, J.G., et al., "Optical energy gaps in the monoclinic oxides of	
AKS		hafnium and zirconium and their solid solutions", Journal of Physical Chemistry,	
		69(10), (1965),3666-3667	1
		GUILLAUMOT, B, et al., "75 nm damascene metal gate and high-k integration	
		for advanced CMOS devices", Technical Digest of International Electron Devices	
		Meeting, 2002, (2002), 355-358	
		GUTOWSKI, M J., "Thermodynamic stability of high-K dielectric metal oxides	
		ZrO/sub 2/ and HfO/sub 2/ in contact with Si and SiO/sub 2/", Applied Physics	İ
		Letters, 80(11), (March 18, 2002),1897-1899	
i		JEON, SANGHUN, et al., "Excellent electrical characteristics of lanthanide (Pr.	
		Nd, Sm, Gd, and Dy) oxide and lanthanide-doped oxide for MOS gate dielectric	
. 1		applications", Electron Devices Meeting, 2001. IEDM Technical Digest.	ŀ
		International, (2001),471-474	
	 	JUNG, H S., et al., "Improved current performance of CMOSFETs with nitrogen	
		incorporated HfO/sub 2/-Al/sub 2/O/sub 3/ laminate gate dielectric*, Technical	
		Digest of International Electron Devices Meeting 2002, (2002),853-856	
		KANG, L, et al., "MOSFET devices with polysilicon on single-layer HfO/sub 2/	
		high-K dielectrics", International Electron Devices Meeting 2000. Technical	
		Digest. IEDM, (2000),35-8	
····		KIM, Y W., et al., "50nm gate length logic technology with 9-layer Cu	-
•		interconnects for 90nm node SoC applications", Technical Digest of International	
		Electron Devices Meeting 2002, (2002),69-72	1
	-	KUKLI, K , et al., "Comparison of hafnium oxide films grown by atomic layer	
İ		deposition from iodide and chloride precursors", Thin Solid Films, 416,	
		(2002),72-79	1
		KUKLI, KAUPO, et al., "Influence of thickness and growth temperature on the	
		properties of zirconium oxide films growth by atomic layer deposition on silicon",	
		Thin Solid Films, 410(1-2), (2002),53-60	
	 	KUKLI, K J., et al., "Properties of hafnium oxide films grown by atomic layer	
		deposition from hafnium tetraiodide and oxygen", Journal of Applied Physics,	
		92(10), (November 15, 2002),5698-5703	1
		LEE, BYOUNG H., et al., "Characteristics of TaN gate MOSFET with ultrathin	
		hafnium oxide (8 A-12 A)", Electron Devices Meeting, 2000. IEDM Technical	1
1		Digest. International, (2000),39-42	1
		LEE, BYOUNG H., et al., Technical Digest of International Electron Devices	┼
AKS		Meetings 2002, 221-224.	
	L	WEGUINGS 2002, 221-224.	٠

EXAMINER	Asol	Munax	Sarlar	DATE CONSIDERED	8/3/04	

PTC/SB/08A(10-01)
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Sheel AMARAMAR	Attorney Docket No: 1303.107US1			

AKS	LEE, S J., et al., "High quality ultra thin CVD HfO2 gate stack with poly-Si gate electrode", Electron Devices Meeting, 2000. IEDM Technical Digest. International, (2000),31-34	
	OH, CB., et al., "Manufacturable embedded CMOS 6T-SRAM technology with high-k gate dielectric device for system-on-chip applications", Technical Digest of International Electron Devices Meeting 2002, (2002),423-426	
	PARK, JAEHOO, et al., "Chemical vapor deposition of HfO/sub 2/ thin films using a novel carbon-free precursor: characterization of the interface with the silicon substrate", <u>Journal of the Electrochemical Society</u> , 149(1), (2002),G89-G94	
	POVESHCHENKO, V P., et al., "Investigation of the phas composition of films of zirconium, hafnium and yttrium oxides", Soviet Journal of Optical Technology, 51(5), (1984),277-279	
	ROBERTSON, J., "Band offsets of wide-band-gap oxides and implications for future electronic devices", <u>Journal of Vacuum Science & Technology B</u> (<u>Microelectronics and Nanometer Structures</u>), 18(3), (May-June 2000),1785-1791	
	TAVEL, B, et al., "High performance 40 nm nMOSFETs with HfO/sub 2/ gate dielectric and polysilicon damascene gate", <u>Technical Digest of International Electron Devices Meetings 2002</u> , (2002),429-432	
AKS	ZHANG, H, et al., "High permittivity thin film nanolaminates", <u>Journal of Applied Physics</u> , 87(4), (February 2000),1921-1924	